

Applicant: Boney A. Mathew
Serial No.: 10/603,549
Amendment dated August 27, 2004
Reply to Office Action dated June 17, 2004

REMARKS

After entry of the present amendment claims 1, 2, 4 and 7 through 22 will be pending in the application. Claims 3, 5 and 6 have been cancelled. Claim 1 has been amended to more clearly define the invention as originally claimed. Formal drawings are being submitted to complete the filing requirements in this regard.

After entry of the subject amendment, claims 1, 2, 4 and 7 through 22 will be pending in the application with claim 1 written in independent form.

Claims 1 through 22 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over the United States Patent No. 6,096,256 to Aretz (the Aretz Patent) in view of the United States Patent No. 4,536,116 to Murray (the Murray Patent).

2143.03 All Claim Limitations Must Be Taught or Suggested

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

2142 Legal Concept of *Prima Facie* Obviousness

...The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness...

ESTABLISHING A PRIMA FACIE CASE OF OBVIOUSNESS

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach

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or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not be based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP §2143-§2143.03 for decisions pertinent to each of these criteria. The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

The Aretz Patent teaches a method of making inserts for molded plastic parts wherein an insert **22** and a pre-formed cap **28** (mis-numbered in Figure 6) are connected one with the other by an adhesive, a tape, or the like and then placed into a mold cavity wherein a plastic **30** is introduced to form a part **8**. The pre-formed cap **28** is pre-made from polyethylene, which has a rigid structure and is not movable like a natural rubber.

The Aretz Patent **does not** teach or suggest injecting an insulating layer composition of a thermoset elastomer into a mold cavity to bond to bottom surface and sides of an insert to form an insulating layer having sides and a bottom to expose an open top, wherein the insulating layer is bonded to the insert. The Aretz Patent does not expressly or impliedly suggests the use of a thermoset elastomer to form the cap **28**.

Similarly, the Murray Patent teaches a part **20A** having a metal insert **10** and a plastic insert **50**. The plastic insert **50** and the metal insert **10** engaged therein are placed into a cavity **38** defined between mold plates **40**, **42** wherein a plastic material is introduced to form the part **20A**. The plastic material partially encapsulates the metal insert **10** and the plastic insert **50** leaving gaps defined between the metal insert **10** and the plastic insert **50**. The plastic insert **50** is formed of high density polypropylene material. Similar to the pre-formed cap **28** taught by the Aretz Patent, the Murray Patent teaches the plastic insert formed of the material having rigid structure is not movable like a natural rubber.

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The Murray Patent **does not** teach or suggest injecting an insulating layer composition of a thermoset elastomer into a mold cavity to bond to bottom surface and sides of an insert to form an insulating layer having sides and a bottom to expose an open top, wherein the insulating layer is bonded to the insert. The Murray Patent does not expressly or impliedly suggests the use of a thermoset elastomer to form the plastic insert **50**.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation in the prior art references to modify the reference or to combine reference teachings or the prior art reference (or references when combined) must teach or suggest all the claim limitations. There is no teaching, motivation, or suggestion in the Aretz Patent to apply the teachings of the Murray Patent to arrive at the Applicant's invention. None of the aforementioned patents teaches or suggest "injecting an insulating layer of a thermoset elastomer", which has characteristics of a natural rubber to accommodate the differences between the coefficients of thermal expansion thereby eliminating problems of potential cracks, sink-marks, and the like, in a plastic surrounding the insulating layer. Both the Murray and Aretz Patents teach using polyethylene, polyphenyloxide, and high density polypropylene materials to form the plastic insert **50** (the Murray Patent) and the pre-formed cap **28** (the Aretz Patent), respectively, thereby **teaching away** from the Applicant's invention.

None of the aforementioned patents teaches or suggests expressly or impliedly the use of a thermoset elastomer to form the Applicant's insulating layer. In fact, using the plastic insert **50** of the Murray Patent or the pre-formed cap **28** of the Aretz Patent in the Applicant's invention will destroy the purpose of the Applicant's inventive insulating layer to accommodate the differences between the coefficients of thermal expansion of the part. There is no suggestion or motivation to modify the Aretz and Murrey Patents or to combine them to arrive at the Applicant's invention. Furthermore, the Aretz and Murrey Patents, when combined, **do not** teach or suggest all the claim limitations, in particular "injecting an insulating layer composition of a thermoset elastomer into a mold

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cavity to bond to bottom surface and sides of an insert to form an insulating layer having sides and a bottom to expose an open top”.

For these reasons, Applicant respectfully submits that independent claim 1 is in condition for allowance.

Accordingly, it is respectfully submitted that the Application, as amended, is now presented in condition for allowance, which allowance is respectfully solicited. Further and favorable reconsideration of the outstanding Office Action is hereby requested.

Respectfully submitted

HOWARD & HOWARD ATTORNEYS, P.C.



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Date

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